Listing of the claims:

1. (Currently amended) A method for evaluating three dimensional ~~feature~~ features on a substrate comprising:

illuminating the substrate from a first angle and capturing a first image of the substrate, the first image comprising a plurality of pixels, the pixels having an address, and a value, the address corresponding to a location on the substrate;

illuminating the substrate from a second angle and capturing a second image of the substrate, the second image comprising a plurality of pixels, the pixels of the second image being addressed in the same manner as the pixels in the first image, and each pixel having a value ;

subtracting the pixel values from the first image from the pixel values in the second image on a pixel address by pixel address basis to create a third image~~, and~~; and

processing the third image to determine the quantity of pixels characteristic of three dimensional features therein and rejecting the substrate if the quantity of pixels characteristic of three dimensional features exceeds a predetermined value.

2. (Original) A method for evaluating a substrate as in claim 1 wherein a threshold is applied to the third image such that the pixel values are either zero or above the threshold, such that the values above the threshold are characteristic of three dimensional features on the substrate, the threshold being applied prior to processing the third image to determine the quantity pixels of characteristic three dimensional features.

3. (Original) A method for evaluating a substrate as in claim 2 wherein the threshold is set by a user.

4. (Original) A method as in claim 2 wherein the quantity of pixels characteristic of three dimensional data is determined by counting the pixel values which exceed the threshold.

5. (Original) A method as in claim 2 wherein the pixel addresses of all pixels in the third image which are above the threshold are recorded.

6. (Original) A method for evaluating a substrate as in claim 5 further comprising:

selecting the minimum pixel value between the first and second images on a pixel address by pixel address basis to create a fourth image; and

processing the fourth image, at and around the recorded pixel addresses, and rejecting the substrate if the processing falls outside predetermined tolerances.

7. (Original) A method as in claim 6 wherein the fourth image is processed with gray scale morphology.

8. (Original) A method for evaluating a substrate as in claim 7 wherein the substrate is ceramic.

9. (Original) A method as in claim 1 wherein the first and second images are captured by a single camera positioned perpendicularly above the substrate.

10. (Original) A method as in claim 9 wherein the first angle is between 10 degrees and 15 degrees from the horizon and the second angle is between 170 degrees and 165 degrees from the horizon.

11. (Original) A method as in claim 9 wherein the three dimensional feature is manifested as a glint.

12. (Currently amended) An apparatus for evaluating three dimensional features on a surface of a substrate, the apparatus comprising:

a first light source positioned at a low angle relative to the substrate such that when the first light source illuminates the surface of the substrate three dimensional features on the surface of the substrate, having a first orientation, produce glints;

a second light source positioned opposite from the first light source, such that when the second light source illuminates the surface of the substrate, three dimensional feature on the surface of the substrate, having a second orientation, produce glints;

a camera positioned perpendicularly above the substrate, the camera operative in capturing images of the substrate wherein the images are made up of a plurality of pixels, the pixels including an address characteristic of a location on the surface of the substrate and a value, the camera operative in capturing a first image of the substrate when the substrate is illuminated by the first light source and a second image of the substrate when the substrate is illuminated by the second light source; and

a processor configured to calculate the difference between the pixel values in the first image and the second image on a pixel address by pixel address basis to form a third image; the processor further configured to calculate the number of pixel addresses in the third image which are characteristic of three dimensional features.

13. (Original) An apparatus as in claim 12 wherein the processor applies a threshold to the third image such that the pixel values in the third image are either zero or above the threshold, the non-zero pixel values being characteristic of three dimensional features, the processor operative in counting the non-zero values within the third image and indicating that the substrate is rejected if the number of non-zero pixel values exceed a predetermined value.

14. (Original) An apparatus as in claim 13 wherein the processor records the pixel addresses of the non-zero pixel values in the third image.

15. (Original) An apparatus as in claim 14 wherein the processor selects the minimum pixel value between the first and second images on a pixel address basis to create a

fourth image, the processor configured to evaluate the size and concentration of the pixel values at the recorded locations, within the fourth image; the processor indicating that the substrate is rejected if the size and concentration of the three dimensional data exceeds predetermined tolerances.

16. (Original) An apparatus as in claim 15 wherein the processor utilizes gray scale morphology to determine the size and concentration of the three dimensional features within the fourth image.

17. (Original) An apparatus as in claim 12 wherein the first light source is positioned at an angle of approximately between 10 degrees and 15 degrees from the horizon.

18. (Original) An apparatus as in claim 17 wherein the camera is a CMOS camera.

19. (Currently amended) An apparatus for evaluating three dimensional features on a surface of a substrate, the apparatus comprising:

a first light source positioned at a low angle relative to the substrate such that when the first light source illuminates the surface of the substrate three dimensional features on the surface of the substrate, having a first orientation, produce glints;

a second light source positioned opposite from the first light source, such that when the second light source illuminates the surface of the substrate, three dimensional features on the surface of the substrate, having a second orientation, produce glints;

a camera positioned perpendicularly above the substrate, the camera operative in capturing images of the substrate wherein the images are made up of a plurality of pixels, the pixels including an address characteristic of a location on the surface of the substrate and a value, the camera operative in capturing a first image of the substrate when the substrate is illuminated by the first light source and a second image of the substrate when the substrate is illuminated by

the second light source; and

a processor configured to calculate the difference between the pixel values in the first image and the second image on a pixel address by pixel address basis to form a third image; the processor configured to apply a threshold to the third image such that the third image comprises a plurality of pixels, the pixels having an address and a value, the value being either zero or above the threshold, the processor operative in counting the number of non-zero pixel values and causing the substrate to be rejected if the number of non-zero pixels exceeds a predetermined value; if the number of non-zero pixel values is below the predetermined value the processor being operative to record the addresses of the non-zero pixel values and operative to calculate a fourth image, the fourth image being the lesser of each pixel value between the first and second images for each pixel address, the processor operative in evaluating the pixel values in the fourth image at the recorded locations to determine the size and concentration of the pixel values and operative to reject the substrate if the size and concentration of the pixel values falls outside a predetermined tolerance.

20. (Currently amended) An apparatus as in claim ~~18~~ 19 wherein said first and second light sources are LED illuminators and the camera is a CMOS sensor.

21. (Currently amended) An apparatus as in claim ~~18~~ 19 wherein the processor is configured to apply gray scale morphology to the ~~first~~ fourth image.

22. (New) A method as in claim 1 wherein the subtracting step further comprises subtracting the pixel values from the first image from the pixel values in the second image on a pixel address by pixel address basis and using an absolute value of each resulting pixel value to create the third image.

23. (New) An apparatus as in claim 12 wherein the processor is further configured to calculate the difference between the pixel values in the first image and the second

image on a pixel address by pixel address basis and to take an absolute value of the difference on a pixel address by pixel address basis to form the third image.

24. (New) An apparatus as in claim 19 wherein the processor is further configured to calculate the difference between the pixel values in the first image and the second image on a pixel address by pixel address basis and to take an absolute value of the difference on a pixel address by pixel address basis to form the third image.